Amendments to the Claims:

Please cancel claims 1-21 and add new reissue claims 22-59 as follows:

Claims 1-21 (Cancelled).

Claim 22 (New): A method for growing at least one layer of III-V alloy semiconductor on a semiconductor substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compound as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least Ga, In, N, and As.

Claim 23 (New): A method for growing at least one layer of III-V alloy semiconductor on a semiconductor substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compound as a source material for nitrogen, and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least Ga, In, N, and As, and wherein said semiconductor comprises not less than 0.5% N.

Claim 24 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method under specified conditions of temperatures and pressures, using a nitrogen containing organic compound as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the

group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least N and As.

Claim 25 (New): The method according to claim 24, wherein said specified conditions are a partial pressure of said source material for arsenic in a reactor of equal to or more than 2 Pa and a temperature of said semiconductor substrate of equal to or more than 550° C.

Claim 26 (New): The method according to claim 24, wherein said specified conditions are a partial pressure of said source material for arsenic in a reactor of equal to or more than 10 Pa and a temperature of said semiconductor substrate of equal to or more than 600°C.

Claim 27 (New): The method according to claim 24, wherein said nitrogen containing organic compound is monomethylhydrazine.

Claim 28 (New): The method according to claim 24, further comprising controlling conductive properties of, and carrier concentrations in said alloy semiconductor by adding a dopant, wherein said dopant is selected from the group consisting of beryllium, magnesium, zinc, carbon, silicon, germanium, tin, sulfur, tellurium, and selenium.

Claim 29 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method under specified conditions of temperatures and pressures, using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least N and As, and wherein said semiconductor comprises not less than 0.5% N.

Claim 30 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compound as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor of equal to or more than 2 Pa and a temperature of said semiconductor substrate equal to or more than 500° C, wherein said III-V alloy semiconductor comprises at least N and As.

Claim 31 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor of equal to or more than 2 Pa and a temperature of said semiconductor substrate equal to or more than 500° C, wherein said III-V alloy semiconductor comprises at least N and As, and wherein said semiconductor comprises not less than 0.5% N.

Claim 32 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method using a nitrogen containing organic compound as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a

partial pressure of said source material for arsenic in a reactor equal to or more than 10 Pa and a temperature of said semiconductor substrate equal to or more than 600° C, wherein said III-V alloy semiconductor comprises at least N and As.

Claim 33 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 10 Pa and a temperature of said semiconductor substrate equal to or more than 600° C, wherein said III-V alloy semiconductor comprises at least N and As, and wherein said semiconductor comprises not less than 0.5% N.

Claim 34 (New): A method for fabricating a semiconductor device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 2 Pa and a temperature of said semiconductor substrate equal to or more than 500° C, wherein said III-V alloy semiconductor comprises at least N and As.

Claim 35 (New): A method for fabricating a semiconductor device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V

elements including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 2 Pa and a temperature of said semiconductor substrate equal to or more than 500° C, wherein said III-V alloy semiconductor comprises at least N and As, and wherein said semiconductor comprises not less than 0.5% N.

Claim 36 (New): A method for fabricating a semiconductor device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD using a nitrogen containing organic compound as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 10 Pa and a temperature of said semiconductor substrate equal to or more than 600° C.

Claim 37 (New): A method for fabricating a semiconductor device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 10 Pa and a temperature of

said semiconductor substrate equal to or more than 600° C, wherein said semiconductor comprises not less than 0.5% N.

Claim 38 (New): The method according to any one of claims 1, 5, 10, 13, 16, 19, 22, 24, 29, 30, 31, 32, 33, 34, 35, 36, and 37, comprising the use of a horizontal type MOCVD apparatus to carry out said MOCVD method.

Claim 39 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method under specified conditions of at least one of temperatures and pressures, using a nitrogen containing organic compound as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least N and As.

Claim 40 (New): A method for growing at least one layer of III-V alloy semiconductor on a GaAs substrate, and including at least nitrogen and arsenic simultaneously, comprising: forming said alloy semiconductor by an MOCVD method under specified conditions of at least one of temperatures and pressures, using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least N and As, and wherein said semiconductor comprises not less than 0.5% N.

Claim 41 (New): A method as in claim 40 wherein the specified conditions comprise conditions of temperatures.

Claim 42 (New): A method as in claim 40 wherein the specified conditions comprise conditions of pressures.

Claim 43 (New): A semiconductor device fabricated by the method of any one of claims 16-53.

Claim 44 (New): A light emitting device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least Ga, In, N, and As.

Claim 45 (New): A light emitting device as in claim 44, wherein said semiconductor comprises not less than 0.5% N.

Claim 46 (New): A light emitting device as in claim 44, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine.

Claim 47 (New): A photodetecting device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen and using a source material for arsenic, wherein said III-V alloy semiconductor

comprises at least Ga, In, N, and As.

Claim 48 (New): A photodetecting device as in claim 47, wherein said semiconductor comprises not less than 0.5% N.

Claim 49 (New): A photodetecting device as in claim 47, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine.

Claim 50 (New): A light emitting device having at least one layer of III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 2 Pa and a temperature of said semiconductor substrate equal to or more than 500° C, wherein said III-V alloy semiconductor comprises at least N and As.

Claim 51 (New): A light emitting device as in claim 50, wherein said semiconductor comprises not less than 0.5% N.

Claim 52 (New): A light emitting device having at least one layer of III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low

pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 10 Pa and a temperature of said semiconductor substrate equal to or more than 600° C.

Claim 53 (New): A light emitting device as in claim 52, wherein said semiconductor comprises not less than 0.5% N.

Claim 54 (New): A photoconductive device having at least one layer of III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 2 Pa and a temperature of said semiconductor substrate.

Claim 55 (New): A light emitting device as in claim 54, wherein said semiconductor comprises not less than 0.5% N.

Claim 56 (New): A photoconductive device having at least one layer of III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy

semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compounds as a source material for nitrogen, wherein said nitrogen containing organic compound is selected from the group consisting of monomethylhydrazine, dimethylhydrazine and tertiary butyl amine, and using a source material for arsenic, under conditions such as a partial pressure of said source material for arsenic in a reactor equal to or more than 10 Pa and a temperature of said semiconductor substrate equal to or more than 600° C.

Claim 57 (New): A light emitting device as in claim 56, wherein said semiconductor comprises not less than 0.5% N.

Claim 58 (New): A semiconductor device, having at least one layer of a III-V alloy semiconductor on a GaAs substrate, comprised of a plurality of group V elements including at least nitrogen and arsenic simultaneously, fabricated by the method of forming said alloy semiconductor by an MOCVD method at a pressure of at least that of conventional low pressure MOCVD, using a nitrogen containing organic compound as a source material for nitrogen and using a source material for arsenic, wherein said III-V alloy semiconductor comprises at least Ga, In, N, and As.

Claim 59 (New): A light emitting device as in claim 58, wherein said semiconductor comprises not less than 0.5% N.

The Office is hereby authorized to charge any additional fees that may be required in connection with this Statement and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Entry of this amendment and allowance of this application are respectfully requested.

Respectfully submitted,

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